

IN THE SPECIFICATION

Please enter the following amended replacement paragraphs:

[0040] Alternatively, gain adjustments G_n and phase adjustments Φ_n compensating for $G_d(A)$ can be modified during operation until the correct response is achieved for the channel. Input controls may be provided, for example, for the user to adjust the transformation parameters G_n and Φ_n in real time. Alternatively, an adaptive loop may be provided, for example, that automatically adjusts the transformation parameters G_n and Φ_n in real time. For example, a test signal may be transmitted and received through a satellite transponder channel or a simulation of the channel, and the error in the received signal may be used to adjust the transformation parameters G_n and Φ_n until the received signal is correct. The input controls can be, for example, a set of manual potentiometer knobs or a computer controlled channel-QOS feedback loop. In practice, the transformation parameters G_n and Φ_n may be set once for each set of channel conditions and satellite transponder.